THAT WHICH IS CLAIMED IS:

1. A marine outboard motor comprising:

a power unit comprising a drive output and an exhaust outlet; and

a pump jet comprising

a rotor hub and a rotor carried thereby, said rotor hub connected to the drive output of said power unit for selective rotation for forward or reverse motion, said rotor hub having an internal passageway connected in fluid communication with the exhaust outlet, and

an exhaust bypass movable between normal and bypassed positions, said exhaust bypass when in the normal position directing exhaust through the internal passageway of said rotor hub to discharge downstream of said rotor during forward motion, said exhaust bypass when in the bypassed position bypassing exhaust from the internal passageway to discharge downstream of said rotor during reverse motion.

2. A marine outboard motor according to Claim 1 wherein said exhaust bypass is self-set to the normal position based upon rotation of said rotor hub for forward motion, and to the bypassed position based upon rotation of said rotor hub for reverse motion.

3. A marine outboard motor according to Claim 1 wherein said exhaust bypass comprises:

an outer sleeve having a plurality of spaced apart exhaust windows therethrough; and

an inner sleeve having a plurality of spaced apart exhaust windows therethrough;

said exhaust bypass being in the normal position when the spaced apart exhaust windows are non-overlapping, and being in the bypassed position when the exhaust windows are overlapping.

4. A marine outboard motor according to Claim 3 wherein said outer sleeve is stationary, and said inner sleeve rotates for placing said exhaust bypass in the normal or bypassed position.

5. A marine outboard motor according to Claim 4 wherein said outer sleeve includes at least one slot; and wherein said inner sleeve comprises at least one pin extending outwardly therefrom and into the at least one slot, said exhaust bypass being in the normal or bypassed position based upon rotation of said at least one pin in the at least one slot.

6. A marine outboard motor according to Claim 4 wherein said drive output comprises a rotor shaft extending outwardly from said power unit and through said exhaust bypass for engaging said rotor hub; said rotor hub including an outer end surface with a circular groove therein, and said inner sleeve including a circularly shaped protruding end that is received by the groove in said rotor hub, and rotation of said rotor hub causes said inner sleeve to rotate based upon a viscous friction therebetween.

7. A marine outboard motor according to Claim 4 wherein said drive output comprises a rotor shaft extending outwardly from said power unit and through said exhaust bypass for engaging said rotor hub; said rotor hub further comprising a lever pivotally connected in the internal passageway thereof and having a first end engaging said inner sleeve, and rotation of said rotor hub causes said inner sleeve to rotate.

8. A marine outboard motor according to Claim 7 wherein said lever has a second end, and rotation of said rotor hub above a predetermined speed causes the first end to disengage said inner sleeve.

9. A marine outboard motor according to Claim 7 wherein said lever is under compression so that the first end thereof engages said inner sleeve.

10. A marine outboard motor according to Claim 1 wherein said pump jet further comprises:

a rotor housing enclosing said rotor hub, said rotor and said exhaust bypass; and

a stator housing connected to said rotor housing and comprising a stator hub having an internal passageway connected in fluid communication with the internal passageway of said rotor hub.

11. A marine outboard motor according to Claim 10 further comprising a housing for carrying said power unit, said housing including a mounting plate extending above said pump jet; and wherein said stator housing further comprises a dorsal fin extending

therefrom for securing said pump jet to said mounting plate.

12. A marine outboard motor according to Claim 10 further comprising a housing for carrying said power unit, said housing including a mounting plate extending above said pump jet; and wherein said rotor housing further comprises a dorsal fin extending therefrom for securing said pump jet to said mounting plate.

13. A marine outboard motor according to Claim 10 further comprising a housing for carrying said power unit, said housing including a skeg; and a clamp for securing said rotor housing to said skeg.

14. A pump jet for a marine outboard motor comprising:

a rotor hub and a rotor carried thereby, said rotor hub to be connected to a drive output of the outboard motor for selective rotation for forward or reverse motion, said rotor hub having an internal passageway to be in fluid communication with an exhaust outlet of the outboard motor; and

an exhaust bypass movable between normal and bypassed positions, said exhaust bypass comprising

an outer sleeve having a plurality of spaced apart exhaust windows therethrough, and

an inner sleeve having a plurality of spaced apart exhaust windows therethrough,

said exhaust bypass being in the normal position when the spaced apart exhaust

windows are non-overlapping for directing exhaust through the internal passageway of said rotor hub to discharge downstream of said rotor during forward motion, and being in the bypassed position when the exhaust windows are overlapping for bypassing exhaust from the internal passageway to discharge downstream of said rotor during reverse motion.

15. A pump jet according to Claim 14 wherein said exhaust bypass is self-set to the normal position based upon rotation of said rotor hub for forward motion, and to the bypassed position based upon rotation of said rotor hub for reverse motion.

16. A pump jet according to Claim 14 wherein said outer sleeve is stationary, and said inner sleeve rotates for placing said exhaust bypass in the normal or bypassed position.

17. A pump jet according to Claim 16 wherein said outer sleeve includes at least one slot; and wherein said inner sleeve comprises at least one pin extending outwardly therefrom and into the at least one slot, said exhaust bypass being in the normal or bypassed position based upon rotation of said at least one pin in the at least one slot.

18. A pump jet according to Claim 16 wherein the outboard motor comprises a rotor shaft extending outwardly therefrom and through said exhaust bypass for engaging said rotor hub; said rotor hub including an

outer end surface with a circular groove therein, and said inner sleeve including a circularly shaped protruding end that is received by the groove in said rotor hub, and rotation of said rotor hub causes said inner sleeve to rotate based upon a viscous friction therebetween.

19. A pump jet according to Claim 16 wherein the outboard motor comprises a rotor shaft extending outwardly therefrom and through said exhaust bypass for engaging said rotor hub; said rotor hub further comprising a lever pivotally connected in the internal passageway thereof and having a first end engaging said inner sleeve, and rotation of said rotor hub causes said inner sleeve to rotate.

20. A pump jet according to Claim 19 wherein said lever has a second end, and rotation of said rotor hub above a predetermined speed causes the first end to disengage said inner sleeve.

21. A pump jet according to Claim 19 wherein said lever is under compression so that the first end thereof engages said inner sleeve.

22. A pump jet according to Claim 14 further comprising:

a rotor housing surrounding said rotor hub, said rotor and said exhaust bypass; and

a stator housing connected to said rotor housing and comprising a stator hub having an internal passageway connected in fluid communication with the internal passageway of said rotor hub.

23. A pump jet according to Claim 22 wherein the outboard motor comprises a housing including a mounting plate that extends above the pump jet; and wherein said stator housing further comprises a dorsal fin extending therefrom for securing said pump jet to the mounting plate.

24. A pump jet according to Claim 22 wherein the outboard motor comprises a housing including a mounting plate that extends above the pump jet; and wherein said rotor housing further comprises a dorsal fin extending therefrom for securing said pump jet to the mounting plate.

25. A method for discharging exhaust from a pump jet for a marine outboard motor comprising a power unit including a drive output and an exhaust outlet, the pump jet comprising a rotor hub and a rotor carried thereby, the rotor hub being connected to the drive output of the power unit for selective rotation for forward or reverse motion, and the rotor hub having an internal passageway connected in fluid communication with the exhaust outlet, the method comprising:

placing an exhaust bypass in a normal position during forward motion for directing exhaust through the internal passageway of the rotor hub for discharging downstream of the rotor; and

placing the exhaust bypass in a bypassed position during reverse motion for bypassing exhaust from the internal passageway for discharging downstream of the rotor during reverse motion.

26. A method according to Claim 25 wherein the exhaust bypass is self-set to the normal position based upon rotation of the rotor hub for forward motion, and to the bypassed position based upon rotation of the rotor hub for reverse motion.

27. A method according to Claim 25 wherein the exhaust bypass comprises an outer sleeve having a plurality of spaced apart exhaust windows therethrough, and an inner sleeve having a plurality of spaced apart exhaust windows therethrough; wherein placing the exhaust bypass in the normal position during forward motion comprises positioning the spaced apart exhaust windows so that they are non-overlapping; and wherein placing the exhaust bypass in the bypassed position during reverse motion comprises positioning the spaced apart exhaust windows so that they are overlapping.

28. A method according to Claim 27 wherein the outer sleeve is stationary, and the inner sleeve rotates for placing the exhaust bypass in the normal or bypassed position.

29. A method according to Claim 28 wherein the outer sleeve includes at least one slot; and wherein the inner sleeve comprises at least one pin extending outwardly therefrom and into the at least one slot, the exhaust bypass being in the normal or bypassed position based upon rotation of the at least one pin in the at least one slot.

30. A method according to Claim 28 wherein

the power unit comprises a rotor shaft extending outwardly therefrom and through the exhaust bypass for engaging the rotor hub; the rotor hub including an outer end surface with a circular groove therein, and the inner sleeve including a circularly shaped protruding end that is received by the groove in the rotor hub, and rotation of the rotor hub causes the inner sleeve to rotate based upon a viscous friction therebetween.

31. A method according to Claim 28 wherein the drive output comprises a rotor shaft extending outwardly from the power unit and through the exhaust bypass for engaging said rotor hub; said rotor hub further comprising a lever pivotally connected in the internal passageway thereof and having a first end engaging the inner sleeve, and rotation of the rotor hub causes the inner sleeve to rotate.

32. A method according to Claim 31 wherein the lever has a second end, and rotation of the rotor hub above a predetermined speed causes the first end to disengage the inner sleeve.